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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,137	11/03/2003	Andrew J. Ouderkirk	51474US010	3710
32692	7590	08/25/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			CHEN, VIVIAN	
PO BOX 33427				
ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER

1773

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/700,137	Applicant(s) OUDERKIRK ET AL.	
	Examiner Vivian Chen	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, (5-10)/1, 11, (15-20)/11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,641,883 (WEBER ET AL) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463) and MORI (US 4,459,642).

The '883 patent claims optical devices comprising wedges or light guides wherein the structures comprise at least two opposing optical surfaces and reflective optical films on said optical surfaces, said optical films comprising a plurality of layers, wherein at least one layer is birefringent. The optical devices are optionally hollow.

EUROPEAN PATENT APPLICATION discloses that it is well known in the art to use reflective multilayer optical films in conventional optical and reflective articles such as solar

energy intensifiers, or tubes having circular or elliptical or lenticular cross-sections. (lines 30-48, page 4; line 24-33, page 8; line 2-15, page 9).

MORI discloses that it is well known in the art to use opposing reflective films in light guide structures, wherein the light guide has a cylindrical or polygonal cross-section, and wherein the structure optionally has a tapered, conical structure. (Figures 12, 14; line 26-28, 60-68, col. 2)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known optical film structures as disclosed in EP '463 in the devices claimed in the '883 patent in order to obtain efficient light reflecting articles. It also would have been obvious to use the claimed optical devices as components in conventional light guiding articles as disclosed in MORI.

3. Claims 1-3, 5-10, 11-13, 15-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of U.S. Patent No. 6,080,467 (WEBER ET AL) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463) and MORI (US 4,459,642).

The '467 patent claims optical devices comprising wedges or light guides wherein the structures comprise at least two opposing optical surfaces and reflective optical films on said optical surfaces, said optical films comprising alternating pairs of first and second layers, wherein the first and second layers have the recited relationships of refractive indices in an in-plane direction and the thickness direction.

EUROPEAN PATENT APPLICATION discloses that it is well known in the art to use reflective multilayer optical films in conventional optical and reflective articles such as solar energy intensifiers, or tubes having circular or elliptical or lenticular cross-sections. (lines 30-48, page 4; line 24-33, page 8; line 2-15, page 9).

MORI discloses that it is well known in the art to use opposing reflective films in light guide structures, wherein the light guide has a cylindrical or polygonal cross-section, and wherein the structure optionally has a tapered, conical structure. (Figures 12, 14; line 26-28, 60-68, col. 2)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known optical film structures as disclosed in EP '463 in the devices claimed in the '467 patent in order to obtain efficient light reflecting articles. It also would have been obvious to use the claimed optical devices as components in conventional light guiding articles as disclosed in MORI.

4. Claims 4, 14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

(a) claims 1-25 of U.S. Patent No. 6,641,883 (WEBER ET AL) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463) and MORI (US 4,459,642); or

(b) claims 1-34 of U.S. Patent No. 6,080,467 (WEBER ET AL) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463) and MORI (US 4,459,642);

as applied to claims 1, 11 above,

and further in view of ROGERS (US 3,610,729).

ROGERS discloses that it is well known in the art to form optical films from alternating layers of birefringent and isotropic polymers in order to form high efficiency polarizing reflectors (lines 25-40, col. 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use optical films containing alternating layers of birefringent and isotropic layers as disclosed in ROGERS '729 in the devices claimed in the '467 or '883 patents in order to obtain efficient polarizing reflective articles.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, (5-10)/1, 11, (15-20)/11 are rejected under 35 U.S.C. 103(a) as being unpatentable over MORI (US 4,459,642) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463).

MORI discloses optical structures incorporating opposing selectively reflective films, wherein the structures typically have a cylindrical or polygonal cross-section, and wherein the structure optionally has a tapered, conical structure. (Figures 12, 14; line 26-28, 60-68, col. 2) However, the reference does not explicitly disclose the recited optical film.

EUROPEAN PATENT APPLICATION discloses that it is well known in the art to utilize reflective multilayer optical films comprising alternating layers of polymeric materials, wherein at least one material is birefringent as reflective components in conventional optical and reflective articles such as solar energy intensifiers, or in the form of tubes having circular or elliptical or lenticular cross-sections. (lines 30-48, page 4; line 24-33, page 8; line 2-15, page 9).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known optical film structures as disclosed in EP '463 in the devices of MORI in order to obtain highly selective light guiding articles.

7. Claims 4, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MORI (US 4,459,642) in view of EUROPEAN PATENT APPLICATION 0 404 463 (hereinafter EP '463), as applied to claims 1, 11 above, and further in view of ROGERS (US 3,610,729).

ROGERS discloses that it is well known in the art to form optical films from alternating layers of birefringent and isotropic polymers in order to form high efficiency polarizing reflectors (lines 25-40, col. 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use optical films containing alternating layers of birefringent and isotropic layers as disclosed in ROGERS '729 in the devices claimed in MORI in order to obtain efficient polarizing reflective articles.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (571) 272-1516. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 22, 2004



Vivian Chen  
Primary Examiner  
Art Unit 1773